

In re: Williams *et al.*
Serial No.: 10/662,621
Filed: September 15, 2003
Page 2 of 7

In the Claims:

1-26 (Cancelled)

27. (New) A method of producing a biocompatible intraluminal prosthesis for *in vivo* use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from polymeric material, wherein the polymeric material contains one or more toxic materials;

masking one or more portions of the polymeric material;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed from unmasked portions of the polymeric material by the densified carbon dioxide composition; and

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material, such that the intraluminal prosthesis is suitable for *in vivo* use.

28. (New) The method of Claim 27, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.

29. (New) The method of Claim 27, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

30. (New) The method of Claim 27, wherein the immersing step comprises adjusting the pressure and/or temperature of the densified carbon dioxide composition to selectively absorb toxic materials from the polymeric material.

31. (New) The method of Claim 27, further comprising:
lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

In re: Williams *et al.*
Serial No.: 10/662,621
Filed: September 15, 2003
Page 3 of 7

removing the separated toxic materials.

32. (New) The method of Claim 31, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

33. (New) The method of Claim 27, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

34. (New) The method of Claim 27, wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant.

35. (New) The method of Claim 27, wherein the intraluminal prosthesis is a stent.

36. (New) The method of Claim 27, wherein the polymeric material is erodible.

37. (New) The method of Claim 27, wherein the polymeric material is non-erodible.

38. (New) The method of Claim 27, wherein the polymeric material is a coating on one or more portions of the intraluminal prosthesis.

39. (New) The method of Claim 36, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(*p*-dioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), poly(glycolic acid), poly(D-lactic-co-

In re: Williams *et al.*
Serial No.: 10/662,621
Filed: September 15, 2003
Page 4 of 7

glycolic acid), poly(L-lactic-co-glycolic acid), poly (D,L-lactic-co-glycolic acid), poly(ε-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydrovalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylene tetraphthalate), poly(lactic acid-*co*-lysine), poly(L-lactic acid) and poly(ε-caprolactone) copolymers.

40. (New) A method of producing a biocompatible intraluminal prosthesis for *in vivo* use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from erodible polymeric material selected from the group consisting of: surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(*p*-dioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), poly(glycolic acid), poly(D-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), poly (D,L-lactic-co-glycolic acid), poly(ε-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydrovalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylene tetraphthalate), poly(lactic acid-*co*-lysine), poly(L-lactic acid) and poly(ε-caprolactone) copolymers, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the intraluminal prosthesis is suitable for *in vivo* use.

In re: Williams *et al.*
Serial No.: 10/662,621
Filed: September 15, 2003
Page 5 of 7

41. (New) The method of Claim 40, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.

42. (New) The method of Claim 40, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

43. (New) The method of Claim 40, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

44. (New) The method of Claim 40, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

45. (New) The method of Claim 40, wherein the intraluminal prosthesis is a stent.

46. (New) The method of Claim 40, further comprising masking one or more portions of the polymeric material prior to immersing the polymeric material in a densified carbon dioxide composition, such that toxic materials are absorbed from unmasked portions of the polymeric material.

47. (New) The method of Claim 40, wherein the intraluminal prosthesis comprises a portion thereof that is formed from non-erodible polymeric material.

48. (New) The method of Claim 40, wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant.

In re: Williams *et al.*
Serial No.: 10/662,621
Filed: September 15, 2003
Page 6 of 7

49. (New) The method of Claim 40, wherein the polymeric material is a coating on one or more portions of the intraluminal prosthesis.